



# **EOSDIS**

NASA'S EARTH OBSERVING SYSTEM  
DATA AND INFORMATION SYSTEM

# Relevancy 101

**ESIP Summer Meeting 2016**

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Space Administration under Contract Number **NNG15HZ39C**

# WHAT IS RELEVANCY?

# A la Wikipedia

“how well a retrieved document or set of documents meets the information need of the user”

# Say I'm looking for *ozone* data from the Ozone Monitoring Instrument...

Keyword: ?

omi ozone

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omi ozone

Wait,  
what?

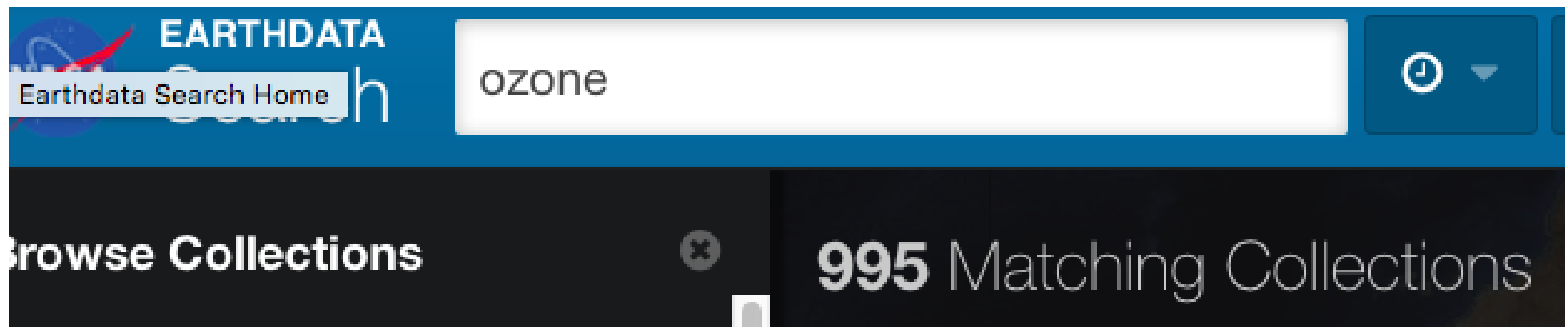
☐ **OMI/Aura Ozone (O3) DOAS Total Column L3 1 day 0.25 degree x 0.25 degree V3 (OMDOAO3e)** ⚙️  
| [View Files](#) | [Info](#) | [Giovanni\\_Analysis](#) | [Data Calendar](#)  
**Approx. 4247 files found (Avg Size: 7.64 MB )**  
**Parameters: OZONE**  
**Spatial Resolution: 0.25 degree x 0.25 degree**  
**Temporal Resolution: 1 day**

☐ **OMI/Aura Bromine Monoxide (BrO) Total Column 1-orbit L2 Swath 13x24 km V003 (OMBRO)** ⚙️  
| [View Files](#) | [Info](#) | [Data Calendar](#)  
**Approx. 60135 files found (Avg Size: 6.85 MB )**  
**Parameters: BROMINE MONOXIDE**  
**Spatial Resolution: 13 km x 24 km**  
**Temporal Resolution: 1 hour**

☐ **OMI/Aura Ozone (O3) DOAS Total Column Daily L2 Global Gridded 0.25 degree x 0.25 degree V3 (OMI)**

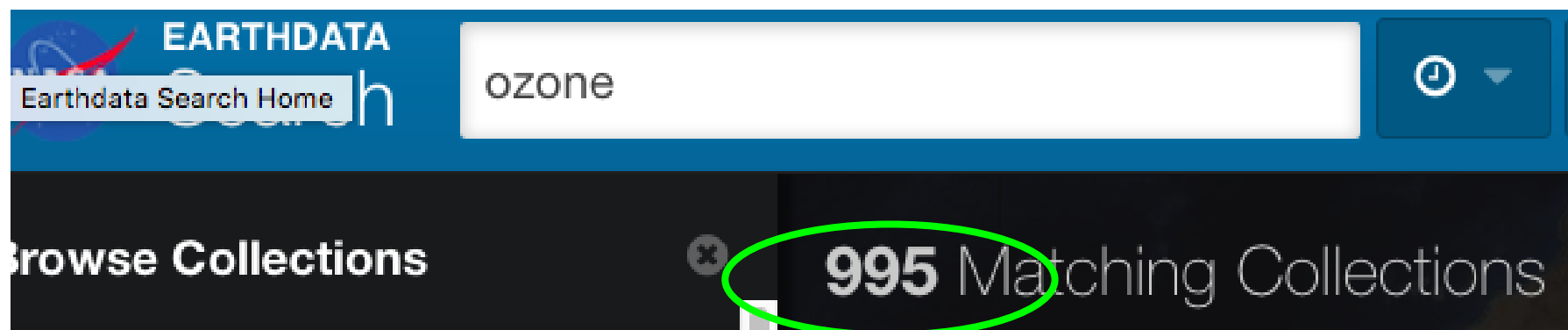
**WHY IT IS IMPORTANT?**

# Back to our ozone search...



The screenshot shows the Earthdata Search web application. At the top left is the Earthdata logo with the text "EARTHDATA" and "Earthdata Search Home". To the right is a search bar containing the text "ozone". Further right is a button with a clock icon and a dropdown arrow. Below the search bar, a dark banner displays "Browse Collections" on the left and "995 Matching Collections" on the right. A small "x" icon is visible between the two sections of the banner.

# Back to our ozone search...



Good thing I'm not busy for the next two weeks :-/




# HOW?

# The Content Heuristic

Well, it would be nice if the dataset actually *had* the content I am looking for...

# New and Improved Heuristic - Processing Version



Newer version is better than older version

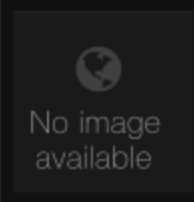


**MLS/Aura Level 2 Ozone (O3) Mixing Ratio V004 (ML2O3) at GES DISC**

ML2O3 v004 - NASA/GSFC/SED/ESD/GCDC/GESDISC

2004-08-08 ongoing | 4280 Granules



 



**MLS/Aura Level 2 Ozone (O3) Mixing Ratio V003 (ML2O3) at GES DISC**

ML2O3 v003 - NASA/GSFC/SED/ESD/GCDC/GESDISC

2004-08-08 to 2015-06-30 | 3935 Granules

# New and Improved Heuristic - Processing Version

New version is more likely to be up to date

**MLS/Aura Level 2 Ozone (O3) Mixing Ratio V004 (ML2O3) at GES DISC**  
ML2O3 v004 - NASA/GSFC/SED/ESD/GCDC/GESDISC  
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# New and Improved Heuristic - Instrument

Newer instrument is supposed to be “better” than previous instruments

# Usability Heuristic

Level 3 Gridded datasets are easier for most users to use than Level 2 Swaths

# Community Usage Heuristic

The dataset most often used by the community is more likely to be useful

# Time Range Heuristic

Datasets covering the user's full time range  
are better than those covering just part of  
it



# Spatial Heuristic

Datasets covering the user's full area are better than those covering just part of it

# User-centric Heuristics

User type or intent	The most relevant datasets are...
Applications users	High spatial resolution, near-real-time
Students	Easier to use data (L3 grids in netCDF)
Climate Modeler	Datasets on Climate Model Grid (CMG)

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**Raytheon**